

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A method for integrating a payload with a launch vehicle in preparation for flight, the method comprising:

~~standardizing payload integration points of the launch vehicle~~ making a plurality of standard payload services available via a plurality of standardized payload integration points of the launch vehicle; and

configuring the payload to interface with the standardized integration points to obtain payload services specific to the payload, said configuring performed apart from the launch vehicle.

2. (currently amended) The method of claim 1, wherein said configuring comprises configuring an interface element to interface with the payload and the standardized launch vehicle integration points.

3. (original) The method of claim 2, wherein configuring an interface element comprises configuring a payload carrier to interface with at least one of an avionics system, a software system, a fluid system and a mechanical system of the launch vehicle.

4. (currently amended) The method of claim 1, ~~wherein standardizing comprises~~ further comprising configuring one or more systems of the launch vehicle to provide ~~one or more~~ the standard payload services ~~to one or more payloads~~.

5. (original) The method of claim 1, wherein configuring comprises:
configuring the payload to interface with a payload carrier; and
configuring the payload carrier to interface with the launch vehicle integration points.

6. (original) The method of claim 1, wherein configuring the payload comprises configuring at least one of a deployable payload and a non-deployable payload.

7. (currently amended) A method for integrating ~~one or more~~ a plurality of payloads with a launch vehicle ~~without reconfiguring the launch vehicle~~, the method comprising:

configuring an interface element to interface with the ~~one or more~~ payloads and with ~~one or more~~ a plurality of standardized integration points of the launch vehicle to allow the ~~one or more~~ payloads to interface with ~~one or more~~ a plurality of systems of the launch vehicle;

configuring the payloads to interface with the interface element; and

integrating the interface element with the launch vehicle without reconfiguring the launch vehicle.

8. (currently amended) The method of claim 7, further comprising ~~configuring the one or more payloads to interface with the interface element~~ providing via the standardized integration points a plurality of standard payload services by the systems of the launch vehicle.

9. (currently amended) The method of claim 7, further comprising emulating ~~[[the]] one or more~~ of the standardized integration points of the launch vehicle to test the ~~one or more~~ payloads, the testing performed using a test and verification system.

10. (currently amended) The method of claim 7, wherein the ~~one or more~~ systems of the launch vehicle include an avionics system.

11. (original) The method of claim 10, wherein the interface element includes a payload carrier, and configuring an interface element comprises configuring an avionics system of the carrier to interface with the launch vehicle avionics system.

12. (currently amended) The method of claim 7, further comprising providing at least one of power, monitoring/commanding, attitude/pointing, contamination control, fluid services and active cooling to the ~~one or more~~ payloads via the ~~one or more~~ integration points of the launch vehicle.

13. (currently amended) The method of claim 7, wherein at least one of the ~~one or more~~ payloads is deployable from the launch vehicle.

14. (currently amended) A method for integrating a payload with a launch vehicle in preparation for flight, the method comprising:

standardizing ~~one or more~~ a plurality of integration points of the launch vehicle so that the integration points remain unchanged relative to different payload configurations;

~~configuring~~ providing an interface element that can be configured to allocate services to interface with the one or more standardized integration points to allow the payload to interface with available from one or more systems of the launch vehicle via the standardized integration points to the payload; and

configuring the payload to interface with the interface element.

15. (original) The method of claim 14, further comprising integrating the interface element with the launch vehicle via the one or more standardized integration points.

16. (original) The method of claim 14, wherein the configuring is performed apart from the launch vehicle.

17. (currently amended) The method of claim 14, wherein ~~configuring~~ providing an interface element comprises ~~configuring~~ providing at least one of a payload carrier and a front-end software module.

18. (currently amended) The method of claim 14, wherein standardizing ~~one or more~~ integration points of the launch vehicle comprises standardizing transmission of at least one of data, fluid and power between the payload and the vehicle.

19. (original) The method of claim 14, further comprising reallocating a standardized allocation of a service from the launch vehicle among a plurality of payloads.

20. (original) The method of claim 19, wherein the reallocating is performed based on requirements of the plurality of payloads.